**Amendments to the Specification:**

Please add the following new paragraphs after the paragraph ending on page 12, line 36:

-- Japanese Patent Laid-Open No. 195214/1998 describes a resin etching solution that comprises an aliphatic alcohol, an aliphatic amine, an alkali metal hydroxide compound and water, and as aliphatic alcohols there may be used monohydric alcohols such as methyl alcohol, ethyl alcohol, propyl alcohol, butyl alcohol and cyclohexanol; methoxyethanol, ethylene glycol monomethyl ether and isomers thereof, as well as ethylene glycol, propylene glycol, trimethylene glycol, butylene glycol, tetramethylene glycol, pentamethylene glycol, diethylene glycol, triethylene glycol and polyethylene glycols of molecular weight up to about 500.

These aliphatic alcohols preferably have higher boiling points than the etching temperature in order to ensure maintenance and stability of the solution composition, and the number of carbon atoms is preferably lower in order avoid reducing the concentration of other components in the etching solution while maintaining a constant hydroxyl concentration in the etching solution. Ethylene glycol and propylene glycol are preferred from this standpoint, while methanol and ethanol, though having low carbon numbers, also have low boiling points and are therefore not preferred for etching of polyimide films with high chemical resistance, such as the aforementioned Upilex S.

These aliphatic alcohols have the effect of improving the etching rate even when present in small amounts, but their effect is minimal if added at under 1%, while their admixture at greater than 40% is not preferred since it lowers the concentration of the other effective components, thus reducing the etching effect. From this standpoint, they are used in a range of 1%-40%, and most preferably 5%-30%.

The aliphatic amine used may be a monovalent amine which includes primary amines such as n-butylamine, amylamine and hexylamine, secondary amines such as diethylamine, dipropylamine, diisopropylamine and dibutylamine, and tertiary amines such as triethylamine, tripropylamine and tributylamine; or a divalent amine which includes ethylenediamine, triethylenediamine, tetramethyldiamine, pentamethylenediamine and hexamethylenediamine.

In addition, a water-soluble primary or secondary amine with an alcoholic hydroxyl group in the same molecule, such as a hydroxyalkylamine, or a mixture of the primary and secondary amines, may also be added. Such primary and secondary amines with a hydroxyl group include ethanolamine, propanolamines such as n-propanolamine or isopropanolamine, butanolamines such as n-butanolamine or 2-amino-1-butanol, and N-(beta-aminoethyl)ethanolamine, diethanolamine, dipropanolamine, N-methylethanolamine and N-ethylethanolamine.

The best etchability is achieved with systems using monovalent or divalent aliphatic primary amines, and they are preferred because they provide more economical etching rates for forming throughholes of prescribed dimension and shape in polyimide films with high chemical resistance, such as the aforementioned Upilex S on which metal patterns are formed.

There is also no problem with using a hydroxyalkylamine with the structures of an aliphatic alcohol and aliphatic amine in the same molecule, to constitute part of the aliphatic alcohol or aliphatic amine.

On the other hand, in the case of polyimide films which are more easily etched, such as the aforementioned Kapton or Apical, the object may be sufficiently achieved by adding an aliphatic secondary amine to an aliphatic primary amine, or with an aliphatic secondary amine alone. Tertiary amines are not preferred because they do not give economical etching rates even with Kapton or Apical, and also cause swelling and minute cracking in the polyimide resin.

The concentration of the aliphatic amine may be 8%-70%, and preferably 10%-40% based on the aqueous etching composition solution. If the concentration of the aliphatic amine is too low the etching rate is lowered, and if it exceeds 70% the concentration of the other essential component, the alkali metal compound, is reduced and the etching rate is lowered.

In addition, the alkali metal compound is most preferably potassium hydroxide from the standpoint of an economical etching rate, but other substances such as sodium hydroxide and lithium hydroxide may also be used, either alone or in admixture.

Also, they may be used in concentrations of from 5% to saturation at the temperature used; a lower concentration is not preferred as it can result in a slower etching rate and more destruction of the etching hole pattern (flawed shape and dimensions), while conversely a high concentration can result in blockage of pipes at lower temperatures, and therefore a concentration of about 10%-48% is preferred. Generally, 20%-45% is more preferred for an economical etching rate and to prevent destruction of etching hole patterns.

The etching temperature must be appropriately selected depending on the type of polyimide resin for etching. It is generally in the range of from 20°C to the boiling point of the system, and preferably 30°C-90°C. When the polyimide film is to be etched on one side, the difference in diameter on the upper and lower sides of the punched etching hole will produce a taper, and addition of urea is effective for reducing the degree of taper. The etching rate will not be affected even when urea is added.

Also, addition and mixture of an organic polar solvent is preferred when necessary as it can result in smoother etching hole walls and help to remove the etching residue. A suitable organic polar solvent is N-methyl-2-pyrrolidone (NMP). Urea and an organic polar solvent may both be added as well. --